


Date: Thursday, 04/12/2008 11:52:32 AM
 User: Chantal Lavoie

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SADDLE BILLET (6061)
Job Number : 43918	
Estimate Number : 12482	
P.O. Number :	Part Number : D6102013
This Issue : 04/12/2008 S.O. No. :	Drawing Number : D6102 REV D
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : PURCHASED PARTS	Drawing Revision : D
Previous Run : 41962	Material :
Written By :	Due Date : 23/12/2008 Qty: 10 Um: Each
Checked & Approved By : 	
Comment : Est Rev:A New Issue 06-07-03 JLM	

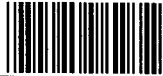
Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	PG	PURCHASING
-----	----	------------

Comment: Issue P/O: 7758

- a) Description: Aluminum Billet
 b) 7.000" x 6.500" x 2.000" thick
 c) Tolerance on all dimensions is +0.06/0.00
 d) Grain direction along 6.500" length
 e) Material: 6061-T6/T6511 (QQ-A-250/11 or QQ-A-200/8)
 Material release certificate is required

C208112104

(10)

2.0	D6102013P	6061-T6 7.0x6.5x2.0
-----	-----------	---------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)
 6061-T6 7.000"x6.500"x2.000"

3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure material certification is attached

C 8/12/16 (10)

4.0	QC6	DIMENSIONAL CHECK
-----	-----	-------------------



Comment: DIMENSIONAL CHECK
 Check certification to Dwg D6102 for compliance

ML 08/12/17 (10)

5.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1
 Identify and Stock
 Location: _____

ML 08/12/17 (10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 04/12/2008 11:52:32 AM
User: C. Lavoie Chantal Lavoie

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET (6061)

Job Number: 43918

Part Number: D6102013

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



08/12/18 JG

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-12-17

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

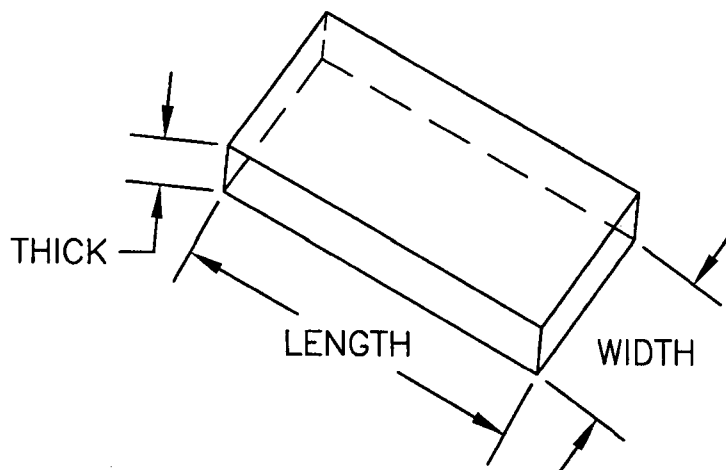
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN #	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CP	APPROVED #	DRAWING NO. D6102	Rev. D SHEET 1 OF 1
DATE 06.06.30		TITLE SADDLE BILLET, 6061	SCALE NTS
A	01.03.30	NEW ISSUE	
B	03.10.20	ADD D6102-005/-007/-009	
C	04.08.25	ADD D6102-010/-011	
D	06.06.30	ADD D6102-013	

SPECIFICATION CONTROL DRAWING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 43918

RELEASED

06.08.15 #

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.06/-0.00), AND GRAIN DIRECTION AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.06/-0.00.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6102-001	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.880	6.250	2.000	Along 7.880 Length
D6102-003	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.000	6.250	2.000	Along 6.000 Length
D6102-005	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	47.85	15.250	1.000	Along 47.85 Length
D6102-007	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.500	7.000	2.500	Along 7.500 Length
D6102-009	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	11.000	6.000	5.000	Along 11.000 Length
D6102-010	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.950	8.250	2.500	Along 7.950 Length
D6102-011	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.500	8.250	2.500	Along 6.500 Length
D6102-013	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.500	7.000	2.000	Along 6.500 Length

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REQUISITION CLIENT-CUSTOMER REQUISITION NO.		NO. COM. CLIENT-CUST. ORD. NO.		COMPTÉ-ACCT.		VEND.-SLS		TERR.		EXPÉDIE PAR-SHIP VIA	
		7758		91037		200		50		MANITOULIN	
HETEUR-PURCHASING AGENT		TELEPHONE		H/C		TAXE		NO. COM. ORD.		REGION LIVRAISON-DEL ZONE	
CHANTAL		613 632-3336		9		0		1		C/C	
/RÉ A-SHIP TO:		VENDU A-SOLD TO:		INFORMATION CRÉDIT-CREDIT INFORMATION		BILL		NO. FEVILLE/EMBALLAGE-B/L NUMBER			
		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY ON K6A 1K7								ROUTE 01-NL-12/1: 30-NL-12/1: 31-NL-12/1:	
INSTRUCTIONS/LIVRAISON-DELIVERY		INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)		INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)							
IND-L89371											

SCRIPTION - ITEM 1		QTE/UNITE COM.-ORDERED		POIDS COM.-WT. ORDERED	
2.0000 PLATE (6061-T65) ALUM 7" X 6.50"		10 PCS		91	
BLUE		BALLOTS-BUNDLES		PCES/PO EXP. SHP.	
		1		10	
<div> <div>CERTIFICATE OF CONFORMANCE</div> <div> <div>A.M. Castle & Co. certifies that the material(s) supplied under this document will meet and conform to the specifications of the product(s) described hereon.</div> <div>A.M. Castle & Co. (Canada) Inc.</div> </div> </div>		INSTRUCTIONS		COULÉE INFO-HEAT INFO QTE-QTY	
		TOL: +.030"/-.000"		410221A6	
		GRAIN TO RUN ALONG 6.50"			
		PRIOR DIST/ORD: 01 706841			
<div> <div>WEIGHT FOR SHIPPING PURPOSES ONLY. SEE INVOICES FOR ACCURATE BILLING WEIGHT. PLEASE SIGN AND DATE DRIVER'S COPY FOR RECEIPT OF MATERIAL AND, IF CHECKED, TEST REPORTS.</div> <div></div> </div>		INSTRUCTIONS (CONT'D.)		ENT-WH	
		410x6.50"		N3	

SCRIPTION - ITEM 2		QTE/UNITE COM.-ORDERED		POIDS COM.-WT. ORDERED	
		BALLOTS-BUNDLES		PCES/PO EXP. SHP.	
<div> <div>TERMS AND CONDITIONS OF SALE</div> <div>SEE DISCLAIMERS AND LIMITATIONS ON THE REVERSE SIDE</div> </div>		INSTRUCTIONS		COULÉE INFO-HEAT INFO QTE-QTY	
		YSKUP			
		INSTRUCTIONS (CONT'D.)		ENT-WH	

SCRIPTION - ITEM 3		QTE/UNITE COM.-ORDERED		POIDS COM.-WT. ORDERED	
		BALLOTS-BUNDLES		PCES/PO EXP. SHP.	
<div> <div>ALL EXCEPTIONS FOR SHORTAGE OR DAMAGE MUST BE NOTED ON THE DRIVER COPY & CUSTOMER COPY OF THE DELIVERY RECEIPTS & SIGNED BY THE DRIVER & CUSTOMER. COPY OF SUCH RECEIPT PROPERLY NOTED MUST BE SUBMITTED WITHIN 10 DAYS WHEN CREDIT IS REQUESTED.</div> </div>		INSTRUCTIONS		COULÉE INFO-HEAT INFO QTE-QTY	
NOM (LETRE MOULEE)-NAME (PRINT ONLY)		INSTRUCTIONS (CONT'D.)		ENT-WH	
RECU PAR-RECEIVED BY					
DATE RECU-DATE RECEIVED					

SHIP TO: A M CASTLE & CO - <i>KS - 2/2</i> 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131 <i>1AC 21041</i>
SOLD TO: AM CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4117829

CUSTOMER PO NUMBER: 01-41238	WORK PACKAGE:	CUSTOMER PART NUMBER: 30509 A98061-80	SHIP RUN/LOAD ID: 101181/8	GOV'T CONTRACT NUMBER:		
KAISER ORDER NO: 1060913	LINE ITEM: 1	SHIP DATE: 5-JAN-2008	ALLOY: 6061	CLAD: BARE	TEMPER: T651	PRODUCT DESCRIPTION: PRECISION PLATE
WEIGHT SHIPPED: 5258 LB	QUANTITY: 3 PCS EST.	S/L NUMBER: 2015928	GAUGE: 2.0000 IN	WIDTH: 60.500 IN	LENGTH: 144.500 IN	

Certified Specifications

AMS 4027/RevM
ASTM B 209/Rev06

AMS-QQ-A-250/11

ASME SB 209/Rev2004

Test Code: 1511

Test Results

Lot: 410221A6 Cast 641 Drop 59 Ingot 1

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T651	LT / 2 (Min:Max)	47.8 : 48.2 (330 : 332)	43.5 : 44.1 (300 : 304)	13.5 : 14.3

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.74	0.6	0.31	0.05	1.0	0.20	0.12	0.02	0.01	0.00	TOT 0.07

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
6061 MIN	0.40	0.0	0.15	0.00	0.8	0.04	0.00	0.00	0.00	0.00	EACH	0.05
MAX	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

P3PXM

Controlled by CASTLE METALS - Mtl.
to P & WC - MCL Manual Section FC-17

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO 9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR

CASTLE METALS CORP.

DATE RCVD 1/10/08

IAC 30509

APPROVED BY *[Signature]*



Report Date **November 4, 2008**
Page **1 of 1**

C08102801

H																	He	
Li	Be											B	C	N	O	F	Ne	
Na	Mg											Al	Si	P	S	Cl	Ar	
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe	
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn	
Fr	Ra	Ac																

<p>Customer #: 31-572896</p> <p>Material: AMS 4027</p> <p>Shape: ---</p> <p>Dimensions: 2" thick.</p> <p>Heat #: 410221A6</p> <p>Other #: ---</p> <p>Testing Specification: ASTM E 1479</p>	<p><u>SEMI-QUANTITATIVE SPECTRO-CHECK</u></p> <p>The ICP-AES spectrographically detectable elements are present in approximately the required amounts for AMS 4027</p>
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Relative Humidity: 23%

Comments: Conforming with MCLM FC-23 E

P3PXM

Subcontractor A77

Document #GT-C311-02

Jean Lavoie, PE Metallurgist